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ABSTRACT

Examples of placement and follow-up conceptual models developed for a program of vocational education (kindergarten through university) are presented. Section 1 contains a historical overview of placement and follow-up activities in Florida and describes a comprehensive model. Section 2, describing a model for utilizing community resources for the development of jobs for a school-based placement service, provides an in-depth analysis of the program components (including assessment, job placement, job development through community resources, longitudinal placement, and internal program evaluation). Section 3 describes an approach for collecting and disseminating placement data on a longitudinal basis at an area vocational-technical center. Section 4 provides a conceptual outline of the steps followed in collecting and using student follow-up information on a district level. Section 5 describes a junior college placement model which assists students and accommodates the employers' position in the placement process. Section 6 describes the Computer Assisted Placement Services System (CAPS) implemented in senior high schools of Duval County, Florida. Section 7 describes how to initiate and implement a follow-up research program at a junior college. Section 8 describes a three-part system for collecting student performance indicators--an employer survey, a junior/community college program, and a university component. (TA)

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COMPILATION OF CASE STUDIES:

EXEMPLARY PLACEMENT AND FOLLOW-UP STUDIES

by

Dr. Jack Dale

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A Comprehensive Program of Vocational Education
for Career Development: K-University

Exemplary Project in Vocational Education
Conducted Under
Part D of Public Law 9-576

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A. Career Education and Your Child, A Guide for Parents

B. Community Resource Guide for Career Education

C. A Model for Implementation of Career Education Into The Community College

D. Manatee County, Florida - Middle School Career Education Model As Based On The Nine Federal Objectives

E. Sarasota County, Florida - Junior High Career Education Model As Based On The Nine Federal Objectives

F. Compilation of Case Studies Exemplary Placement and Followup Studies

G. An Inservice Model: Micro-Interviewing Skills Develped For Occupational Specialists

H. Public Relation and Public Information Inservice Training For Occupational Specialists and Ohter School Personnel

I. Elementary Career Education Activity Resource Guide

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SECTION I

HISTORICAL OVERVIEW OF PLACEMENT AND FOLLOW-UP ACTIVITIES IN FLORIDA AND A COMPREHENSIVE MODEL FOR PROVIDING SUCH SERVICES

SECTION I

HISTORICAL OVERVIEW OF PLACEMENT AND FOLLOW-UP ACTIVITIES IN FLORIDA AND A COMPREHENSIVE MODEL FOR PROVIDING SUCH SERVICES

Dr. Jack Dale

Comprehensive placement services and periodic follow-up studies of students leaving Florida's high schools and community colleges was the direct result of action taken by the state legislature. This edict required that "on or before September 1, 1971, each school district board shall establish and maintain job placement and follow-up services for all students graduating or leaving the public school system." This legislation not only applied to the state's 67 school districts, but it also applied to the 28 state junior/community colleges in existence at that time.

Prior to the passage of this law, the vocational division of the State Department of Education engaged several related efforts. In 1970-1971 support was granted for the follow-up of vocational completers in Sarasota County. This effort was expanded to include vocational graduates from 22 area centers and 3 counties the following year. The year 1972-1973 marked a further proliferation of the vocational survey to include all completers from the previous year.

The 1973 session of the legislature passed the placement and follow-up bill and a flurry of activity took place at the State Department of Education and at the district levels. In Tallahassee representatives from the elementary and secondary, vocational and community college

divisions met to draft guidelines for implementation and operation. The result of these sessions was that two separate documents, one for the community colleges and a second for district use, were drafted and approved. These documents provided a plan of action and staff members from the State Department of Education actively toured all areas of Florida disseminating this information.

Concurrent with the development and dissemination of the guidelines was the support of a second pilot effort in Sarasota County. This project was an extension of the 1970-1971 survey activities in the county and expanded services to meet the letter of the law and the intent of the guidelines. The original follow-up of vocational completers was expanded to include a census survey of the total student graduate and early leaver population. Placement services were now also implemented to serve students leaving the school system either as completers or early leavers.

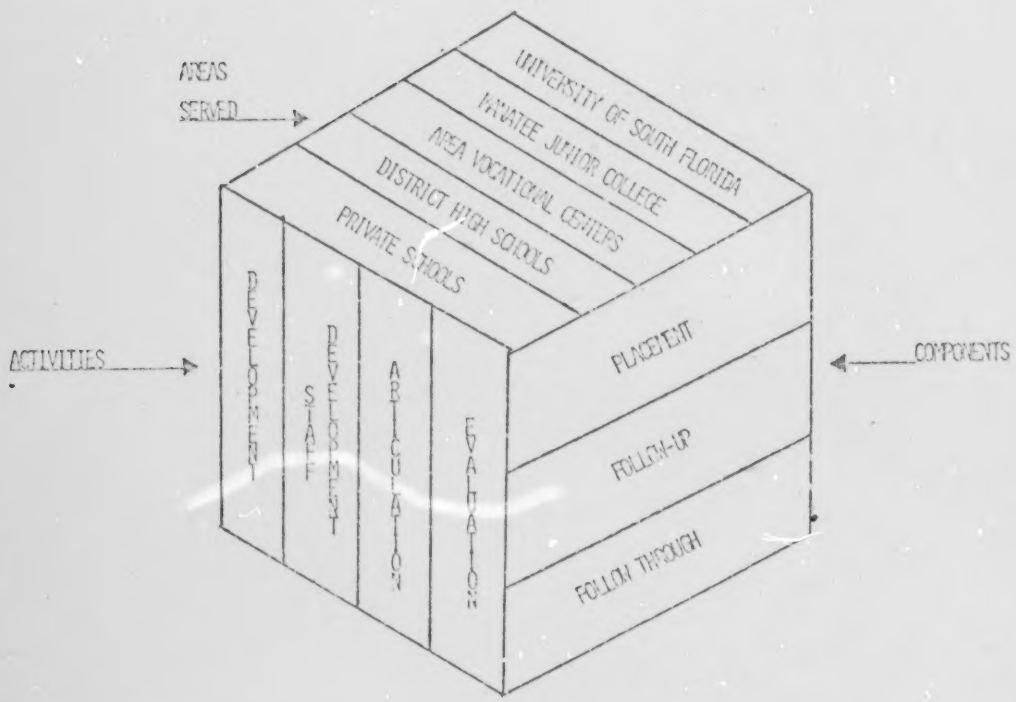
This project also provided support for the development and implementation of placement and follow-up services at Manatee Junior College, an institution located in an adjacent county. The placement and follow-up program implemented at this institution had the same components as the district model, but characteristics of the services reflected the community college division placement and follow-up guidelines rather than those that applied to the district schools.

The year 1973-1974 was pivotal for placement and follow-up activities in the state. This was the first year for state-wide implementation, an effort that was supported with funds provided by the legislature to the vocational division under the category of career education. This tie between placement and follow-up and career education was natural because one critical measure of a successful career education program is suitable placement

for all clients, and one way to determine if this has occurred is through the collection of valid follow-up information. Additional support for this bond also surfaced in 1974 when the Office of Education funded, through Part D of the Vocational Education Act, a career education project in the state of Florida. This project had the goal of the development of a K-University career education model which included placement and follow-up services at the senior high, community college, and university levels. Figure 1 describes the relationship between the model and the educational institutions in the region.

Figure 1

PLACEMENT AND FOLLOW-UP CONCEPTUAL MODEL FOR CEC PROJECT



This assemblage of case studies is derived from an in-depth analysis of the placement and follow-up components of this project and strived to demonstrate the relationship between these services and the total career education effort.

The criteria for choosing the section reported in this document was to select techniques, practices, and strategies that have proven to be workable in this region with the hope that they will be of value to individuals with similar programs in other parts of the country.

The total model (Robert, 1975) on which this program was operationalized placed emphasis on the belief that placement and follow-up should not be viewed as a separate activity, but it should be considered an integral component of a total process. This model should be viewed as a continuum of activities all related to the ultimate goal of assisting the client in securing a placement that is commensurate with his/her interests, abilities, and desires. This model emphasizes a series of sequential steps that proceed from an information phase on through a follow-up program. This process is not uni-directional in nature; but rather, if an individual encounters difficulty at one stage, then he/she will be recycled through the preceding phases to help him/her accomplish the tasks necessary to achieve a successful career placement.

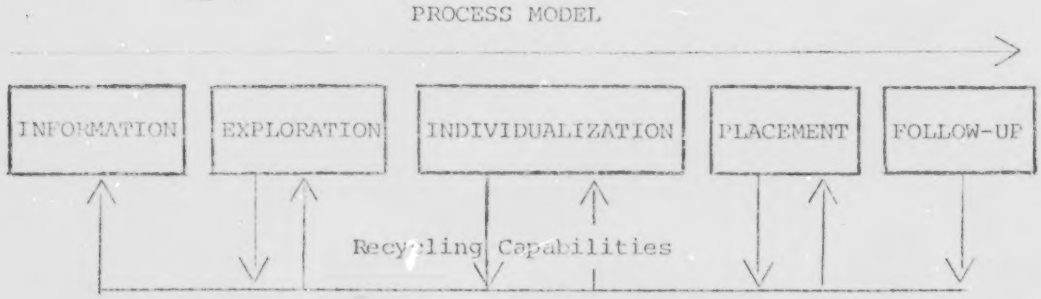


Figure 2

Figure 2 presents this process model component and the sequencing of the individual activities. This process model is presented to provide a better perspective from which the placement and follow-up components can be reviewed.

The first area emphasized in this model relates to activities structured to assist the student to accumulate information about himself and careers. This component is emphasized in the elementary and middle grades through self-awareness and career-awareness programs. The positioning of this segment of the model at the onset of the process does not indicate that it is emphasized at this time and forgotten; but rather, it is so placed to draw attention to information activities as a based from which the remaining components must build.

The exploration phase of this structure calls for hands-on, experiential types of career-related activities. These experiences should initially include exposure to a variety of clusters and may, during the latter phase, focus in on one specific group of occupations, or even a specific job. The exploration phase should include in-school simulation or role playing activities, as well as community-based experiences. The role of the community in this phase of the process and in the succeeding components of this structure is of critical nature and a sizeable proportion.

Individualization refers to helping the client to bring information gained from previous experiences together with knowledge about personal trials and characteristics for the purpose of making some decisions regarding desired placements. This important decision-making stage is commonly approached through an individual interview, discussion, or counseling session.

The actual placement should be directed toward bringing the informed client together with the individuals necessary to help secure the appropriate station. The range of placement to be subsumed within the component is restricted only to those that will help the client to take the next step on the path to his/her career goal. Within this context, placement is not only restricted to paid employment, but is also extended to education, unpaid positions, military, homemaking, and a miriad of other possible activities.

The focal point of the whole model is the successful placement, but to determine if this has occurred, a follow-up component is necessary. The actual contact can be accomplished through a variety of methods, but the ultimate goal of determining the success of the placement does not change. One additional role for follow-up in this model calls for the collection of information related to the adequacy of programs, facilities, and services to gain evaluative information on our efforts.

The total process model is presented in this introductory section to provide a frame from which the placement and follow-up segments can be viewed. The remaining portion of this document will be devoted first to an in-depth breakdown of the placement and follow-up components, and then an analysis of the constituent parts of these segments of the model.

SECTION II

A MODEL FOR UTILIZING COMMUNITY RESOURCES FOR THE DEVELOPMENT OF JOBS FOR A SCHOOL-BASED PLACEMENT SERVICE

SECTION II

A MODEL FOR UTILIZING COMMUNITY RESOURCES FOR THE DEVELOPMENT OF JOBS FOR A SCHOOL-BASED PLACEMENT SERVICE

Jim Preston

INTRODUCTION

The program outlined in this section has been in operation in Sarasota County, Florida, for the past three years. The effort has been evaluated to be successful according to several critical criteria. The first indication of positive performance is reflected in the relatively low and stable rate of unemployment among the district's recent high school graduates. This rate has ranged from 4% to 7% while comparative statistics from the total workforce in the county ranged from 2.4% to 16%. A second area of positive feedback related to the cost effectiveness of the program for the schools and the community. A third favorable performance indicator is the results from the project's client feedback system. This system collects performance data related to student satisfaction rating of clients referred to them through the system. Recently published reports from this effort show positive rating by both the students and the employers.

The theoretical foundation for the system to be outlined in this section is based on the premise that it is the responsibility of the school system to offer quality placement services to its students, and that this service should be provided by the individuals who know them best, the school-based placement specialist. This does not mean that placement should be a spoon-fed service, for one of the best educational functions we can perform is to develop responsible self-directed individuals with

basic competencies in the area of employability skills. In summary, the system is structured to meet the goal of providing services that will facilitate the student's transition from full-time school to full-time employment.

The following pages will provide an in-depth analysis of the components of this school-based placement program. Particular emphasis will be placed on the close cooperation between the school system and local industry that makes this program a model effort.

I. Identification--The Assessment Program

The starting point of the program, from the client's point of view, comes with the pre-graduate data survey. This instrument is structured to identify the segment of the senior class population that needs full-time permanent job placement assistance. Records from the past three years indicate that between 25% to 30% of the graduating class will fall into this category. This assessment is conducted in the latter part of March by the school-based occupational specialist and the district placement officer. It calls for all seniors to be registered by filling out a short survey (Figure 1) which assesses their future plans and present placement status. This form identifies those needing help, and administrators of the instrument make a commitment to serve those seeking assistance. The surveys are printed on NC carbon bond pressure sensitive paper and duplicate copies are filed at the high school and the central office.

This placement needs assessment is conducted late in the school year to be as current as possible, and as near to the time when prospective job openings can be matched with those needing the service. A needs assessment for the college bound student is conducted by the guidance offices at the

start of the junior and senior years; therefore, the pre-graduate survey is designed to identify those needing job placement assistance. It does, however, turn up some last minute requests for assistance in finding entrance into the school and thus gives the counselors a final opportunity to serve these students.

Figure 1

PRE-GRADUATE DATA SURVEY
PLACEMENT & FOLLOW-UP

Name _____ School _____ Social Security number _____
(last) (first)

Permanent address _____
(street) (city) (state) (zip)

Age _____ Date of graduation _____
(month) (year)

Part I

1. Do you plan to continue your education immediately after graduation? _____ yes _____ no
   If your answer to question #1 is yes, please check the type of program you plan to enter.
2. _____ Area Vocational Technical School
3. _____ University/Four-Year College
4. _____ Community/Junior College
5. _____ Military Specialist School
6. _____ Apprentice Related Program
7. _____ Other (specify) _____
8. What particular major or field of study do you plan to follow in your future studies?

   _____

9. Do you need assistance at this time in finding entrance into the program of your choice? _____ yes _____ no

PART II

10. Do you plan to begin full-time permanent employment immediately after graduation? (not a summer job) _____ yes _____ no
11. If your answer to question #10 is yes, what particular type of job will you be seeking?

    _____

12. Will you need assistance in finding full-time employment in the job area you are seeking? _____ yes _____ no

Part III

If you could have your choice in the matter, what kind of employment, position, or situation would you like as your life's work?

13. _____ own business (kind) _____
14. _____ own professional office (kind) _____
15. _____ work for small business or one owned by someone else (kind) _____
16. _____ work for large firm or corporation (type of position) _____
17. _____ work for school (type of position or level) _____
18. _____ work for government (type of position) _____
19. _____ work in a skilled trade occupation (type of trade) _____
20. _____ homemaker
21. _____ other (please indicate) _____
22. Do you have a part-time job at present? _____ yes _____ no
    Name and address of Firm _____
23. Are you planning on leaving this job after graduation? _____ yes _____ no

II. School-Based Job Placement Process

The career interest interview is the first actual step in the student placement process. This session is structured for only the student indicating a need for placement assistance on the pre-graduate data survey.

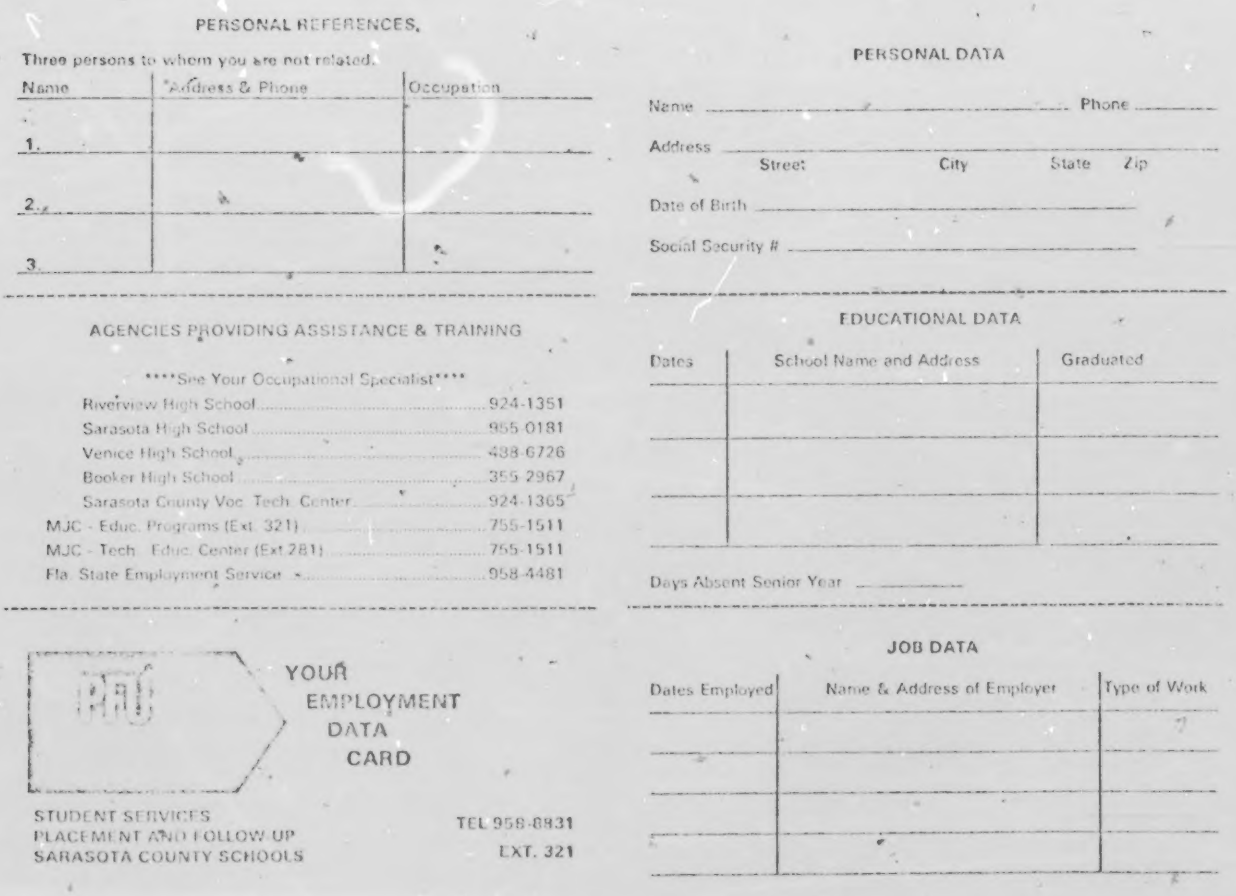
The initial part of this session is centered around a discussion between the school-based occupational placement specialist and the client. Topics covered in this meeting include the student's interests, abilities, training, and career choice. If the client indicates that he/she has not made a career decision, or if his/her selection is only tentative, then they are encouraged to explore career-related resources in the schools and the community. Following this interview, the occupational placement specialist proceeds to collect additional information related to student aptitudes and abilities. Resources commonly utilized during the process include work sample evaluation results, school and work records, and results from interest inventories and standardized tests.

Armed with knowledge of client interests, aptitudes, and abilities, the occupational placement specialist can begin the actual referral process when the first openings reach the schools during the first week in May. Information related to job openings is sent from the county placement coordinator's office to all high schools. This information is minimal in that it only includes the company's name, location, contact person, telephone number, and type of employment opportunity. The reason for only transmitting this descriptive data is that it necessitates a contact by the school-based placement person before critical information, such as job characteristics and skills required, can be ascertained. Calls on prospective employers are restricted to two per opening, and strict adherence to Title IX Rules and Regulations are required by the county and the school-based placement staffs.

After receiving notification of an employment opportunity the school-based specialist starts the process of matching the client to the opening.

Job characteristics are compared to the information file on students seeking employment, and, if matches do occur, those that show the strongest correlation are called in for an appointment. The prospective applicant is briefed during this session on the job opening, and is presented with several items to assist them in preparing for the interview. These items include an employment data card (Figure 2) and two booklets, "Making the Most of Your Job Interview" and "How to Get and Keep the Right Job". These documents are designed to review some key points that have previously been covered in the school's employability skills program in preparation for the actual interview.

Figure 2



PERSONAL REFERENCES

Three persons to whom you are not related.

Name	Address & Phone	Occupation
1.		
2.		
3.		

AGENCIES PROVIDING ASSISTANCE & TRAINING

****See Your Occupational Specialist****

Riverview High School	924-1351
Sarasota High School	955-0181
Venice High School	488-6726
Booker High School	355-2967
Sarasota County Voc. Tech. Center	924-1365
MJC - Educ. Programs (Ext. 321)	755-1511
MJC - Tech. Educ. Center (Ext.281)	755-1511
Fla. State Employment Service	958-4481

YOUR EMPLOYMENT DATA CARD

STUDENT SERVICES
PLACEMENT AND FOLLOW-UP
SARASOTA COUNTY SCHOOLS

TEL 958-8831
EXT. 321

PERSONAL DATA

Name _____ Phone _____

Address _____
Street City State Zip

Date of Birth _____

Social Security # _____

EDUCATIONAL DATA

Dates	School Name and Address	Graduated

Days Absent Senior Year _____

JOB DATA

Dates Employed	Name & Address of Employer	Type of Work

Following the referral and interview, the student has the responsibility to report back to the school specialist. If the client does not secure the job, then additional contact is made with the employer to evaluate the interview, and, hopefully, to identify other potential job openings. The process detailed in this section is in continuous operation during May and June to assist the students who are about to complete high school in securing meaningful employment.

If, during this peak placement period, a student wanting employment appears to be having little success in their interviews, then a supplemental strategy is employed. This plan calls for special help to be given by a central office staff person funded through the CETA Public Service Employment criteria. This person works as a rotating resource assisting clients at each school. This special assistance is vital to a comprehensive program because it provides needed help for those clients that are difficult to place.

III. Job Development through the Utilization of Community Resources

The key to any successful placement program is the availability of a ready bank of suitable employment opportunities. These opportunities can be identified through several processes which will be referred to in this section as "Job Development Strategies". The activities in this model are, however, restricted to those specifically structured to identify jobs for upcoming graduates or leavers seeking full-time permanent career-oriented employment.

The Sarasota model operates at the county level, and employs a district level coordinator and a full-time secretary. The model relies heavily on the utilization of community assistance, and is based on the premise that

local business and industry is committed to the principle of keeping recent high school graduates in the community because they constitute a pool of educated and trained workers that can be regarded as an important local resource.

The cornerstone of this program was developed in cooperation with the Sarasota County Chamber of Commerce in the winter-spring of 1975. Local economic conditions facing the upcoming graduating seniors were bleak at that time with local unemployment rates ranging from 4.5% to almost 13% in less than one year's time. With employment conditions paralleling those of the 1930's, it was evident that a special coordinated effort was necessary if the 1975 graduating class was not to be a major contributor to youth unemployment in the area.

In October of 1974 the School Board of Sarasota County's Career Education Project conducted a highly successful "Career Day" with the local Chamber of Commerce. This undertaking received positive evaluations from both the students and the Chamber members alike, and set the stage for continued related projects. In this favorable atmosphere, a plan was developed with the Chamber's executive director and the manager of news to implement a coordinated activity between the business community and the School Board to assist graduates in becoming employed in Sarasota County. Chamber members were informed of the benefits of having pre-screened applicants with the proper interests and skill levels available to them, and school officials were informed of the importance of this local resource. With the forming of this school-community partnership, several exemplary activities were initiated in the Spring of 1975. Since that time these activities have been expanded to encompass more community associations and resources with the purpose of providing improved local placement service.

The most successful activity initiated at that time was a job development referral system that becomes operational in May and June of each year. This program follows the outline presented below:

A. Chamber of Commerce Development Program for Students

1. April 15--Chamber Newsletter carries an article regarding the previous year's success, employer ratings of recent graduates' performance on the job, and various rationales on the benefits of hiring high school graduates. The theme is built around "our" graduates are one of our most valuable community resources.
2. In the May issue of the Chamber's bi-monthly newsletter, a second article appears announcing, "Chamber to Participate in School Board Job Placement Program." This article outlines to Chamber members, "HOW YOU CAN HELP." This year's program is called "Job Oppoftunities for Students...Referral Program '77."
3. Immediately after the dissemination of the May 1 newsletter, a packet is mailed to all 1800 Chamber members. This packet includes a letter signed by the Chamber president and the School Board's placement and follow-up coordinator. The letter is printed on Chamber stationery and calls for members' cooperation in identifying jobs for students in the upcoming graduation class. In addition to the coverletter, a pre-paid, self-addressed postcard is included which provides a vehicle by which employers with suitable openings can notify the Chamber.
4. When "Prospective Job Opening" cards are returned to the offices, they are forwarded to the centralized school board placement and follow-up office.

5. Central office forwards openings on the day they are received to the individual school-based contact at each of four high schools and an area vocational center.

6. Each occupational placement specialist is responsible for setting up the interviews and for placing their clients into these openings. Initially only one applicant from each school can interview for an opening, controlling the number of applicants to a maximum of five for any individual job opening/employer. If the job is not filled, additional interviews can be arranged on an individual basis.

7. This referral program comes to a close near the end of June. Following the termination of the effort a "Thank You" letter is sent to all Chamber of Commerce members who responded to the postcard, regardless if they actually had job openings or not.

B. Area Manufacturers' Association

At the beginning of April a short presentation is made to the Sarasota Area Manufacturers' Association at their monthly dinner meeting. This presentation by the district placement and follow-up officer results in a job identification and referral system that is similar to that outlined above and used with the Chamber of Commerce members.

C. Media Utilization

The role of local media in the Sarasota job placement program has been considered to be exemplary by the Florida State Department of Education, and has been the topic of numerous presentations at state and national educational conferences. An outline of the various media activities supporting job placement is presented below.

1. Radio--"Student of the Day," a daily radio spot on six different stations for 45 consecutive days (May 1-June 14). This public

service announcement highlights a different student each day who has a special need, ability, or interest. Students are selected by the school guidance staff during initial interviews in April.

Extensive public service announcements regarding the employment needs of our students.

Radio station editorials on "Graduating Seniors--Our Most Important Community Resource."

Community/Dialogue program regarding the school system's placement and follow-up program.

2. Television--Appearances on local "talk show" programs regarding placement activities.

   Public service spots used between programs and at station breaks with placement and follow-up logo and office telephone number.

   Coverage as a community and human interest story on local evening news broadcasts.

3. Newspaper--A unique, highly successful program of free advertising space for students seeking work. The Sarasota Herald Tribune and the Sarasota Journal, in cooperation with the school district, provide our students with free, twenty-word classified advertising space during the second week in June. The ads run in a special section, titled "Student Job Wanted Ads," and detail individual student employment needs. This program is supported by half page Sunday edition displays advertising, supporting, and calling attention to this program. Dollar cost is in the thousands of dollars, (completely paid for by the Sarasota Herald Tribune), and has been cited as the "Outstanding Contribution to the Career Development

of Florida Youth," by the Florida Career Development Association, a Division of Florida Personnel and Guidance Association.

"Thank You" Ad--To cap off this activity, a display advertisement is run in a Sunday edition in the beginning of September. The ad caption reads in bold type, "I GOT THE JOB" and the body of the copy is a "Thank You" to those associations who assisted with referral programs, signed by the most recent senior graduating class. The ad is paid for by the placement and follow-up office or local newspaper.

Bold caps periodically run across classified advertising section stating: "HIGH SCHOOL GRADS MAKE GOOD EMPLOYEES--KEEP OUR YOUTH RESOURCES IN SARASOTA. CALL 958-8831, EXTENSION 321."

IV. Help Needed Six Months after Graduation

Florida Regulations state that school boards have student placement responsibilities for one year after the individual leaves the program. To comply with this requirement the Sarasota model includes a longitudinal placement component. This effort is based on the data collected by the state Vocational, Technical and Adult Education (VTAE) Survey program and the Sarasota follow-up program. If a former student returns this questionnaire and indicates that he/she is "unemployed and looking for work," then they are contacted by telephone and a job placement interview is arranged. If it proves impossible to contact these individuals by telephone, then a letter is sent to the former student's last known address.

When contact is made with these unemployed clients then intensive assistance is provided through the services of a placement specialist furnished to the School Board through the local CETA office. This arrangement

was made possible when, in 1973, Congress decentralized much of the nation's manpower programs and passed the Comprehensive Manpower Training Act. The purpose of this legislation was "to provide job training and employment opportunities for economically disadvantaged unemployed, and underemployed persons, and to assure that training and other services lead to maximum employment opportunities and enhance self-sufficiency."

The key for securing this valuable assistance was to have a target group identified as possessing the needs specified by the CETA mandates. In this model the follow-up survey is used to identify the population and the CETA sponsored placement specialists are utilized to provide the needed services. This special assistance has provided the resources necessary to extend the placement services provided by Sarasota County School Board for one full year after completion.

V. Internal Program Evaluation

To insure that the placement program is meeting its stated objectives and for the purpose of gathering information for managerial decisions, the Sarasota model includes a rigorous internal evaluation component. The initial activity in this effort commences in the middle of June when the senior job placement program begins to wind down. The activity calls for first selecting a sample of all students that requested placement assistance, and then interviewing the students selected to ascertain the amount and the quality of placement help provided.

The results from the 1976 evaluation indicate that:

1. Of those students requesting job placement assistance, 86% were contacted by their school guidance staff.

2. Sixty-one percent responded that the placement assistance helped in some way. Most of the others had gained placement help from other sources such as parents or other adult friends.
3. Ninety-six percent responded "YES" to the question, "Were you satisfied with the placement help you received?"

SUMMARY

The Sarasota placement model relies on the intense utilization of community resources to assist students in making the transition from school to employment as efficiently as possible. The resources mobilized for this effort include those of the business and education community as well as those from governmental agencies. This system has proven to be effective on both a cost and performance basis and may well offer a realistic model for controlling the problem of unemployment among our recent high school graduates.

RESOURCES

Books:

"What Color Is Your Parachute?
"Career Education in the High School"
"Job Power Now"
"Man, Education and Manpower"
"Making Vocational Choices: A Theory of Careers"
"Manpower Planning for Local Labor Markets"

Training Manuals:

"Placement Services: A Training Manual"
Prakken Publications, Inc.
416 Longshore Drive
Ann Arbor, MI 48107

"Placement and Follow-up"
Xerox Individualized Publishing
191 Spring Street
Lexington, MA 02173

Free Materials:

"Making the Most of Your Job Interview"
New York Life Insurance Company
51 Madison Avenue
New York, NY 10010

"How to Get and Keep the Right Job"
Carnation Company
Public Relations Department
Carnation Building
5045 Wilshire Blvd.
Los Angeles, CA 90036

"Sources of Free Occupational Information"
State of California
Employment Development Department
Employment Data and Research
April 1957

Other resources used specifically during the job placement process:

"About Getting a Job"
"After High School, What?"
Channing L. Bete Co., Inc.
45 Federal Street
Greenfield, MA

The Career Education Center
Florida State University
415 North Monroe Street
Tallahassee, FL 32304

"Career Education for the Businessman"
"Career Education, What It Is, How to Use It, and Why We Need It"

Chamber of Commerce of the United States
Washington, D.C. 20062

"Update" article on Career Day

SECTION III

A MODEL FOR COMPILING, ANALYZING AND DISSEMINATING PLACEMENT DATA AT AN AREA VOCATIONAL CENTER

SECTION III

A MODEL FOR COMPILING, ANALYZING AND DISSEMINATING PLACEMENT DATA AT AN AREA VOCATIONAL CENTER

Hilary Smits

Introduction. Vocational education in Florida has been defined as "a program of studies designed primarily to prepare students for work in the occupational areas extending from that of the unskilled employee to that of the technician." (Florida State Advisory Council, 1975) In compliance with this preparatory goal for vocational education, the Sarasota County Vocational-Technical Center has developed a system to longitudinally monitor a client's placement status from the time he/she enrolls in a program through one year after their completion of the program. This placement data is periodically collected, analyzed, and disseminated to instructors to assist them in evaluating the success of their program in meeting their primary goal.

The Student Placement Card. It has been said that one technique of finding out what people hold dearest to them is to see what they would save first when there is a fire. According to this strategy, the first item that would be removed from the placement and follow-up office at the Sarasota County Area Vocational-Technical Center in the event of fire would be the file that contains the student placement cards. These cards contain information gathered at the time the individual registers for a program then they are updated during and after completion of their training. These cards are only maintained for preparatory students, that is, those students

who come to the center for training that are not currently employed in the field.

Figure 1 replicates the front side of the card. It contains basic information such as name, address, and program, as well as a recording of completion and placement status. This side of the card also records the type of placement achieved and the person who was most instrumental in helping to achieve this placement

Figure 1

STUDENT PLACEMENT CARD Program Marine Engine Mechanic

1. Name John Paul Jones Telephone 488-1776
   Address 1492 Ocean Blvd. Sarasota 33577
2. Teacher (s) Barry
3. Date: Completed 6-76 Left with marketable skill Dropped
4. Status of student upon leaving:
   A. Placed
   B. Needs placement assistance (✓)
   (If "A" is checked, complete this side; if "B" is checked, go to other side)
5. Type of placement:
   A. Job title MARINE MECHANIC Employer BONHOMME RICHARD 8/77
   B. Further training. Name of school (Manatee Jr. College) - 7/76
   C. Military. Branch of service
   D. Other. Please specify:
6. Who assisted in this placement?

The reverse side of the card (Figure 2) is utilized to help students that have yet to secure suitable employment. This part of the card is completed based on information gathered just prior to the time the client is scheduled to finish his/her program. It records the type of placement desired, location sought, past work experience, and transportation needs. The card also serves as a record for past job interviews. The information on both sides of the placement card is periodically updated, and it serves as a base document of a monthly placement report.

Figure 2

NAME [illegible] AGE 28 GRADE 13 DATE 9-76

7. Type of placement desired:
   A. Job. What kind Marine engine mechanic
   B. Further training. What kind _____
   C. Other. Please specify _____
8. When available for placement enrolled Preferred location Bay Bay
9. Past work experience Auto mechanic
   Past educational experience [illegible]
   Special skills or training [illegible]

Job Interview Information DATE	LOCATION	OUTCOME
9/12	Bay Yacht Marine	pending

Time lapse before placement _____

This placement report lists the placement status of completers by program each month, and is distributed to center program heads and administrators. In addition to recording the number and placement status of completers, the report also describes the job relatedness of the placements. Figure 3 is an abbreviated version of one such report. This form not only records monthly totals, but it also updates yearly placement figures. At the end of the year, the monthly placement reports are combined into a series of reported which form the Initial Placement Status Report. This document is composed of four separate secitons presenting information on junior completers, secondary completers, adults and a summary of all categories. The rationale for subdividing this report is that these groups have different employment and educational characteristics. The junior completers at the center may have finished their vocational training but not their high school requirements, thus they may not be available for full-time employment. If they were included in the total report without the proper notation, they would erroneously depress the program placement rates.

Figure 3

PLACEMENT REPORT NOVEMBER

	No. of Completions	Placed in field	Placed in related field	Employed out of field	Going to school	Military	Moving from area	Not placed	Status not known
Alligator Repair									
Appliance Repair									
Auto Body Repair									
Auto Mechanics									
Building Construction	1	1							
Cosmetology									
Culinary Arts									
Data Processing									
Drafting									
Electrical Wiring	1			1					
LPN	12	6					2	4	
Medical Office Ass't	6	3		2			1		
Surgical Technician									
Nurse Aide									
Ward Clerk									
Health Service Aide									
Industrial Electronics									
Machine Shop									
Nursery Operations	3	2		1					
Office Occupations									
Plumbing									
TOTALS	23	12		4		3	4		

SUMMARY OF PLACEMENT SITUATION FOR CURRENT YEAR:

Number of completions (includes leavers with marketable skills) this year 352
Number of completors placed this year 242
Number of this year's completors needing placement 23
Number of S.I.E. students on the job 12

The other two categories, secondary graduates and adult completers are reported separately because the graduates have finished their training and have obtained at least a marketable skill, while the adults may have completed their skill training but may not have finished their high school

requirements. The final section of the Initial Placement Report summarizes the overall placement picture at the center for the year. This report is a valuable measure of program placement efficiency, but it must be reviewed in light of several limitations. These shortcomings stem from the lack of depth of this data. The figures reported present a picture of ore point in time and thus do not consider delays or changes in the placement process. An example of type of misinformation that could be derived from the approach would be the classification of an individual who is placed in an area related to training when the student actually remained in the related position for only a few days, and now is actually in an unrelated job. The reverse of this example can also effect this system. It would occur when the individual, upon completion, assumed an unrelated position for only a short period of time and then went on to a job for which he/she received training.

To compensate for these limitations, a longitudinal component has been added to the placement reporting system. This data is collected through the State Department of Education Vocational, Technical, and Adult Education Student Follow-up program. This is a census survey which contacts all completers and leavers with a marketable skill between 4 and 18 months after they leave the center. The data assembled from this effort has proven to be valid and reliable, and it is reported to all the centers through F V T A E I S in St. Petersburg, Florida. The results from this program are reported for industrial programs, health occupations, office occupations, secondary students, and post-secondary students. Several years of analysis have shown this information to be of value to State Department officials, county administrators, and center directors, but not to individual instructors because of the lack of specification. To further

increase the usability of the VTAE survey data in Sarasota County it is locally analyzed down to individual programs and instructors.

Armed with this longitudinal data, the placement specialist at the Sarasota County Area Vocational-Technical Center can update the Initial Placement Report, and thus made the adjustments necessary to compensate for the limitations previously mentioned. Additional information for updating the year end report is also supplied by instructors who are in contact with their former students and completers that contact the placement office.

In summary, since the primary goal of vocational education in the state of Florida is to prepare students for work in occupational areas, then the basic criteria for evaluating such programs should be the degree to which students achieve this goal. The system described in this section is a practical approach for collecting and disseminating such information on a longitudinal basis at an area vocational-technical center.

SECTION IV

THE COLLECTION AND UTILIZATION OF DISTRICT FOLLOW-UP INFORMATION

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THE COLLECTION AND UTILIZATION OF DISTRICT FOLLOW-UP INFORMATION

Nunzie Marinelli

The goal of this section is to provide a conceptual outline of the steps followed in collecting and utilizing student follow-up information on a district level.

Follow-up studies in Manatee County are conducted to meet the following objectives:

(1) To determine the effectiveness of instructional programs in meeting their stated goals and objectives (e.g., how well is the attainment of the instructional goals and objectives demonstrated by the performance of former students?).

(2) To determine the adequacy of goals and objectives of instructional programs in which former students were enrolled (e.g., were former students required to engage in on-the-job activities which were not included in the educational program?).

The initial step toward the attainment of these objectives is the construction and validation of the survey instrument. This phase has encompassed a four step process. First, key administrators and teachers were contacted to ascertain the type of information they felt would be helpful in planning their program. Second, a review of the literature on survey research and instrument development was conducted to facilitate the construction of items that would collect the types of information requested by the school officials. Third, the instrument was piloted with a sample group of seniors to determine the clarity, readability, and reliability of the items. And, finally, the survey was revised to satisfy problems identified in the pilot and then sent to the printer.

The second step in the county survey program is the careful identification of the population to be included in the study. Size of the school district and desires of the administrators for data which can be generalized to the graduating class of each high school dictates a census rather than a sample survey. This program tries to reach all high school graduates six months after the completion of their program.

With the instrument completed and the population identified, the next step involves the actual survey program. The first part of this program calls for the assemblage of a packet that is attractive, neat and efficient. This packet includes a #10 outside envelope addressed with a gum label provided by data processing, a carefullly worded coverletter, the survey, and a self-addressed, stamped, #9 return envelope. The schedule for the dissemination of this packet calls for first mailing an "alert card" during the middle of November to inform the former students that they can expect to be contacted within the next few weeks. This is followed by the first survey mailing on the Friday preceding Thanksgiving. The rationale for the selection of this day is that it allows for the delivery of the surveys on a Monday, the day which research has shown to be optimal for eliciting a high response. It also is effective in contacting former graduates attending college or in the Armed Services because they commonly return home for the holidays.

During the two weeks following the first mailing, a heavy volume of responses makes careful recording of incoming instruments a crucial factor. Lists are maintained on the sex, race, and school attended of the respondents, as well as the date when the survey was returned. The rationale for this procedure rather than something more elaborate will be explained in the survey validation section. Approximately two weeks after the first mailing, the volume of respondents can be expected to dwindle to under 1%

per day. Two courses of action can be taken at this time. First, a second mailout to the non-respondents can be assembled and conducted, or a telephone contact can be made; then a second mailout can be carried out to those indicating they would respond to the survey. Inserting the telephone contact prior to the second mailing has several advantages, especially in a program where most of the survey population reside within a toll free telephone area. These advantages include the opportunity to gain some information as to why the first survey was not returned, the chance to gain some verbal commitment to return the second instrument, and an opportunity to reduce postage costs.

Concurrent with the first mailing is an intense publicity campaign first emphasizing local media (radio, T.V., local newspapers, and district junior college publications). Following the second mailing, the emphasis changes from large media coverage to personal contacts with teachers, relatives, and associates to encourage the return of the surveys. Figure 1 reports the county response for this year.

Figure 1

1977 Manatee County Survey Results

	NUMBER	PERCENT
RESPONDENTS	786	75
NON-RESPONDENTS	259	25
TOTAL POPULATION	1045	100

After about a two-month survey period, the data collection phase is terminated and the next step of analyzing and reporting the data is begun. The actual transfer of information from survey instrument to some form of tabulating media can follow several procedures. If the respondent population is small, then hand tabulation may be practical; but as the number of respondents and items increase, machine tabulation becomes more essential. The two common approaches for preparing this information for computer analysis is to record responses on optical scan score sheets or to have the information key punched. The approach used will largely be dictated by local capabilities, but the survey structure should reflect an awareness of how this task to be accomplished.

Another factor that should be considered when choosing between hand or computer tabulation procedures is the number of different ways you would like the data analyzed. Manatee County has considered a report by school essential and additional runs have been made for sex, race, program, grade point average, and degree of satisfaction with school. In addition, to these runs, cross tabulation can be prepared on characteristics such as sex and race, race and school, and race and degree of satisfaction. These methods of examining the survey results represent only a simple design with much more elaborate statistical package adaptable for survey analysis current on the market.

With the data collection and analysis process complete, the topic of validity becomes the prime concern. The basic questions that are addressed are--do the respondents constitute a valid sample of the total population and do the respondents differ in the ways they answered the questions from the way the non-respondents would have answered. The first question is answered by comparing the respondents and the non-respondents on some known

trait such as sex, race, or school last attended. The respondent recording procedure described earlier in this section that compiles this information as the surveys are returned greatly facilitates this procedure. The comparisons that are made look at the occurance of the trait in the non-respondent population and check to see if it is approximately the same as in the same characteristics in the total population. If the difference in the comparison is small, then no adjustments are needed, but if they are proven to be significant, utilizing a chi-square test, then adjustments should be made.

The second question related to validity asks if the non-respondents and the respondents would differ in the way they answer the questions. One approach that has been utilized has been based on the body of research that "late returns are indicative of difference between returns and non-returns." (Larson and Catton, 1959) This procedure calls for dividing the survey into three periods and comparing the early and the late respondents answers on critical items. The recording of the data of each survey returned simplifies this task, and the comparisons allow for adjustments to be made. These two procedures fall short of a true non-respondent study but they do allow a district with limited resources to deal effectively with the question of validity.

When the data has been analyzed and validated, tabular summaries are compiled and disseminated to the superintendent, curriculum supervisors, and high school principals. These key officials are asked to review the findings and make recommendations. Of special value in encouraging the utilization of this information is the supervisors and principals response sheets. These are distributed and collected by the central office and asks for information on how the data was disseminated and its impact on

future planning. Based on the analysis of the data and the feedback from administrators, a final report is prepared for submission to the Board at their June meeting. The recommendation of the Board is combined with the analysis and the administrators reactions, then this total package is presented to the faculties of all the high schools during the teachers' pre-school planning sessions.

In summary, Manatee County strived to reach its student follow-up objectives by planning a survey program designed to collect information desired by local officials. The information is collected in a manner that has been historically characterized by a high rate of student response, and in-depth procedures followed to validate the data. The information reported by this system does not collect dust on the shelf, but rather, is reviewed and disseminated from the central office to the schools and on to the classroom teachers. In this model, follow-up and follow-through are of equal importance.

SECTION V

A MODEL FOR JUNIOR COLLEGE PLACEMENT SERVICES

SECTION V

A MODEL FOR JUNIOR COLLEGE PLACEMENT SERVICES

Paul Cultrera

Objectives

The main objective of a junior college placement office is service--primarily to the students, secondly to the employers, and finally, to the college program and faculty. It functions as a multi-faceted service organization providing the essential link between education and employment. It helps the work-oriented students to obtain positions compatible with their needs, goals, and qualifications while providing local employers with a pool of college trained, pre-screened employees. The office's service to the college's program and faculty is of critical importance, but it is commonly overlooked. It coordinates career-related experiential activities of students outside the walls of the college with the student's program of study. These activities add a valuable dimension to the individuals social and intellectual development as well as providing practical experience in a work place related to their career goals.

Responsibilities

The primary responsibility of the college placement service is to assist students in obtaining jobs that best coincide with their qualifications and career goals. This is a client-oriented service with the student rather that the employer being the paramount consideration. The office does have the responsibility to assist local employers to obtain qualified personnel, but its first concern when attempting to match client to job

opening should be the student's overall needs, training and career goals.

Services

The services provided by the junior college placement office should coincide with the objectives and responsibilities of the program. At Manatee Junior College these services can be divided into two broad categories--those structured to help students and those designed to benefit employers. The student services can be further subdivided into three critical areas: (a) the assemblage and dissemination of a bank of employment opportunities that are suitable for students enrolled in or completing programs at the college, (b) employability skills training for students having deficiencies in areas critical for securing and retaining positions, and (c) job referral services to facilitate the contact between qualified students and suitable placement opportunities.

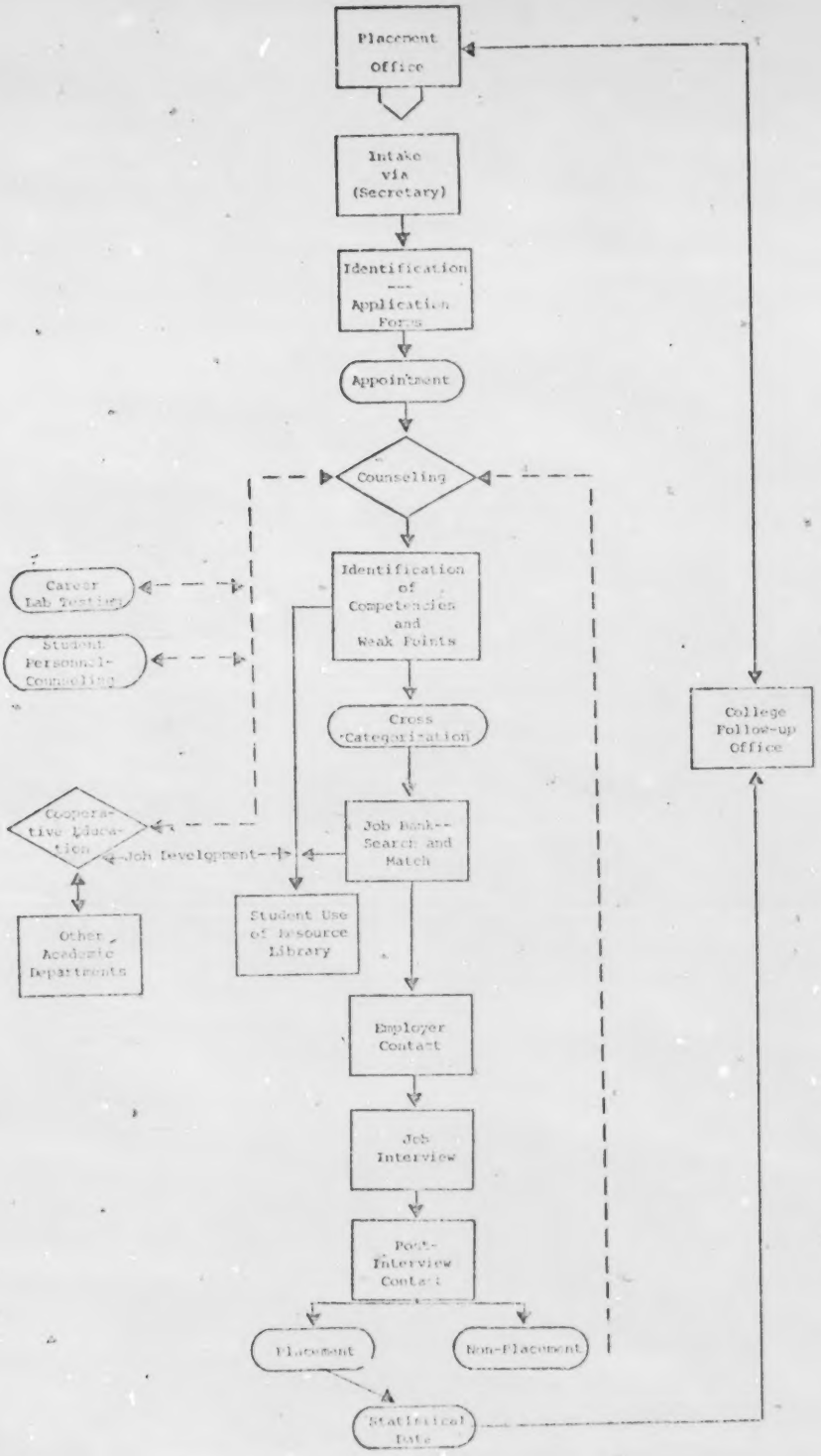
The first services provided, that of assembling and making available a bank of employment opportunities, is the basis for any placement operation. The development and maintenance of this bank of jobs requires close cooperation between the college placement staff and the local business community.

The placement staff must work with the local officials to develop and identify potential employment opportunities. The job development phase is largely carried out through employer surveys and personal contacts while the identification process is operationalized by a structured daily screening of newspaper want ads and the listings provided by the Florida State Employment Service's Job Data Bank.

In addition to jobs identified and developed by the office staff, the bank of openings must also rely on opportunities that are telephoned into the college or that are made available when employers interview on campus. The whole service of job bank maintenance is one that requires communication and flexibility. The two way contact between college and community and community and college is essential as previously mentioned, but it takes on even greater importance as unemployment rates rise and job qualification gives way to job development. During these times the newspapers and employment service openings contribute little to the college job bank. This necessitates more and more time and energy be devoted to personal contacts and job development activities. The maintenance of a sufficient number and variety of employment opportunities is essential if the college job placement office is going to help students.

A second service provided by the placement office is employability skills training for those deficient in these areas. This training is presented in two forms, first there are structured courses in the cooperative education and psychology series that deal specifically with topics related to acquiring and retaining suitable employment. In addition to these group type activities, students identified as needing help are provided with materials and training in such areas as resume development and interviewing strategies. The actual task of identifying students needing supplemental employability skills training is accomplished at the "pre-interview session." This session is conducted with all students prior to referral to any position with the purpose of helping to prepare the individual for the job interview.

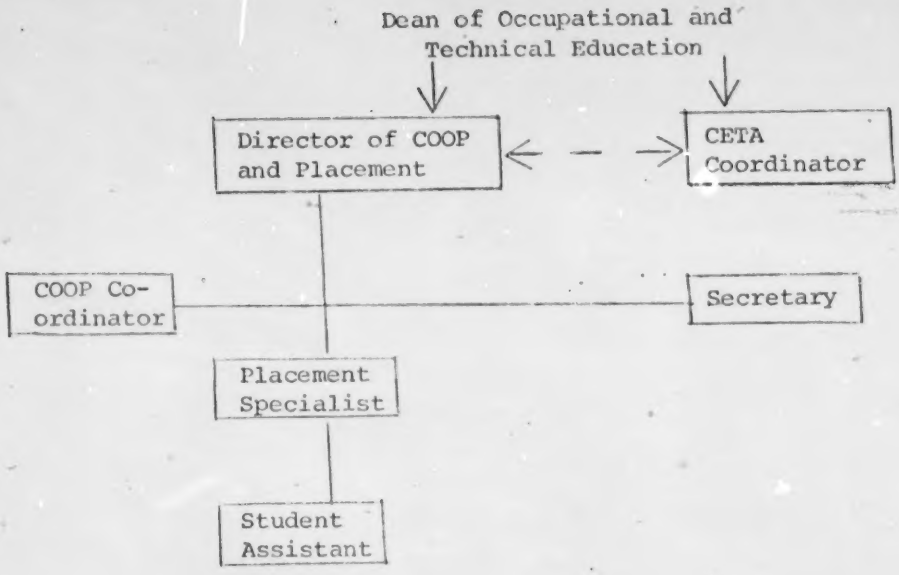
Figure 1


Placement Office
Intake via (Secretary)
Identification — Application Forms
Appointment
Counseling
Career Lab Testing
Student Personnel-Counseling
Identification of Competencies and Weak Points
Cross Categorization
College Follow-up Office
Cooperative Education
Job Development
Job Bank--Search and Match
Other Academic Departments
Student Use of Resource Library
Employer Contact
Job Interview
Post-Interview Contact
Placement
Non-Placement
Statistical Data

The third service provided to the student, that of job referral, is graphically sequenced in Figure 1. This chart traces the route of the student from the time he/she enters the placement office through the pre-employment interview to the job bank search on to the employer contact and job interview. The chart also illustrates the recycling capability built into this model This dimension is initiated with a post-interview contact with both student and employer to determine if the placement was achieved and to assess strengths and weaknesses of the session. If the applicant did not secure the position, then he/she is recycled back to the pre-interview stage of the model and the information collected from the employer is used to help prepare the student to progress through the system again. The referral and placement activities represent the last student-oriented service provided by the office, but they only represent a segment of the total operation.

The second major classification of services provided by the placement office is structured to assist employers to secure college trained persons for their firm. Services in this area include providing suitable facilities on campus for interviewing programs as well as publicizing and scheduling such activities. In addition, the office helps in the preparation of job description, screening of applicants, and actual referral of students for job interviews. In providing these services to staff always take great care to assure that their activities are in compliance with the federal regulations related to discrimination and safety. The quality of service provided by the college placement office to employers and students is closely related to the management and evaluation component of the program. Figure 2 represents an office organizational chart. In this plan both the director of Cooperative Education and Placement and the CETA coordinator

Figure 2



are directly responsible to the Dean of Occupational and Technical Education. The director has responsibility for all cooperative education and placement activities while the coordinator manages CETA sponsored programs on campus and grant development for such activities. The actual operation of the placement office falls into the hands of the placement specialist who is assisted by the office secretary and the student assistant provided by the college work study program. This work breakdown structure has proven to be flexible enough to bring under one roof full-time and part-time placement activities as well as cooperative education and CETA sponsored programs.

One factor that has allowed this staffing plan to function in an efficient manner is an evaluation system that collects data from both students and employers. Student input is collected from a post-placement interview structured to determine how suited and prepared the individual was for the

position he was referred to by the office. If students were ill-suited or improperly referred, it is immediately ascertained at this session. A second strategy for collecting student input comes with a follow-up survey. Figure 3 presents two items on the college follow-up survey structured to collect information related to the quality and availability of placement services on the campus.

Figure 3

C. Please evaluate your major program of study at MJC according to your degree of satisfaction with the quality and availability of the following college functions.

(a) Completely satisfied
(b) Reasonably satisfied
(c) Neither satisfied nor dissatisfied
(d) Slightly dissatisfied
(e) Very dissatisfied
(x) Not applicable

1. _____classroom facilities and equipment
2. _____textbooks
3. _____library facilities and services
4. _____ratio of instructors to students
5. _____quality of instruction
6. _____relevancy of curriculum to my needs
7. _____student advisement services
8. _____career planning services
9. _____availability of career information
10. _____transfer counseling
11. _____job placement assistance
12. _____availability of co-op programs
13. _____college-sponsored activities
14. _____intramural athletic programs
15. _____financial aid services
16. _____veteran's service

D. Please rate the following instructional methods according to their helpfulness to you in your major program.

(a) Very helpful (b) Helpful (c) Little or no help (x) Not applicable

1. _____lecture
2. _____scientific laboratories (Biology, Botany, computer, etc.)
3. _____practicum (Flight training, hospital experience, law enforcement)
4. _____movies, slides, tapes and filmstrips
5. _____study guides
6. _____field trips
7. _____research papers (case studies)
8. _____individual instruction (tutorial lab)
9. _____class or group discussion
10. _____self-paced, programmed instruction (Nursing, MATH 100, etc.)
11. _____CO-OP
12. _____learning by doing (Ceramics, music and art studios)

In addition to collecting evaluative information from former clients, the office contacts employers to assess their rating of the services provided. This component also has two parts. The first being an employer interview which is conducted after a student if referred and the second is in an employer follow-up study. Information collected from both students and employers provide valuable input that is essential to the management of the office.

The model for a community college placement office described in this section was operationalized to assist students in securing suitable

positions and to help employers find college trained workers. The program places its primary emphasis on assisting its clients--the students, but is structured to accommodate the employer's integral position in the placement process.

SECTION VI

C.A.P.S. IN DUVAL COUNTY, FLORIDA

SECTION VI

C.A.P.S.

IN DUVAL COUNTY, FLORIDA

John F. Wagner and Samuel E. Culver

BACKGROUND

The first annual report on the placement and follow-up program in Duval County was presented to the school board in December, 1975.[1] The report included several findings which indicated that assistance was needed in the delivery of placement services. These findings are similar to those found in schools in Pennsylvania through a study conducted by Educational Systems Research Institute.[2]

A. A relatively small percentage of employment bound graduates credit school personnel with assisting them in getting their first full-time job after graduation. Of the graduates responding to the survey, only 25.9% of the vocational education graduates and 6.0% of the academic graduates credited school personnel with assisting them in getting their first job after graduation.

B. The majority of employment bound vocational education graduates did not get jobs in the field in which they received training. Less than half, 45.3% were employed in the same occupation as trained for, or in a highly related occupation. The remaining, 54.7% were employed in an occupation which was only slightly related or completely unrelated to their areas of training.

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[1] Student Placement and Follow-up Program, Annual Report, December, 1975, Duval County School Board.

[2] Report of Job Placement Services in Pennsylvania Secondary Schools, April, 1974, Educational Systems Research Institute, Pittsburgh, Pennsylvania.

C. Many vocational education graduates, 34.8%, reported that they had tried to find employment in their field of training but could not.

D. A large portion of employment bound graduates, 47.8% of the vocational education graduates and 56.7% of the academic graduates, did not have a job lined up prior to graduation.

Input from school placement personnel also substantiated the need for a more positive approach in providing placement services. Based on the findings of the follow-up data and input from school placement personnel, three major generalizations regarding placement services were included in the first annual report:

A. Many students need placement assistance in making the transition from high school to their next career step.

B. Very few jobs learned about through the Florida Employment Service Job Bank are applicable to the population served by the high school placement programs.

C. The need exists to find a more positive way in which high school program completors and dropouts can acquire appropriate jobs.

The placement and follow-up report included a recommendation to improve placement services relative to the three generalizations. It was recommended:

> That the Florida State Employment Service Job Bank be maintained (in the schools) but that job placement services be improved through (1) the addition and/or reassignment of personnel who will have job development responsibilities; and/or, (2) the implementation of some other means of assisting graduates and dropouts in finding jobs, such as a computer assisted placement program.

This recommendation was responded to through the implementation of CAPS in the senior high schools of Duval County. CAPS is the acronym for the Computer Assisted Placement Services System developed by Educational Systems Research Institute (ESRI), Pittsburgh, Pennsylvania. CAPS is operated in Duval County by ESRI through a performance contract. The graduates of the class of 1977 are the second class of graduates in Duval County to have the services of CAPS.

OVERVIEW OF CAPS

The CAPS System is a method of exchanging information between employers and schools with the computer serving as the main tool. Schools register seniors into the system, and report those seeking post-school employment. Employers register into the system and indicate the types of graduates for which they want contact information. Computer compiled CAP-O-GRAMS provide employers with lists of graduates by field of study.

Employers register into the CAPS System on a basis of their hiring trends rather than by specific job openings. The underlying assumption of the CAPS System is that employers with hiring needs will use their own methods to contact potential applicants.

OPERATION OF CAPS

The basic operation of CAPS can be described as having three major components. These components are described relative to the implementation of CAPS in Duval County.

Develop/Obtain Employer Master File. This file is needed to survey potential employers of graduates and establish their hiring interests. Included in the file is employer information including name, address, telephone number, and an identification of the occupations and curriculum

majors for which the employer has indicated a hiring interest. The contracting of CAPS for the Duval County Schools was nearly simultaneous to the contracting of CAPS by the Florida Department of Education for piloting in area vocational centers and junior colleges. Thus, the survey of employers for Duval County was concurrent with the survey of employers for Florida.

The original employer file for CAPS was obtained from the Florida Department of Commerce. Schools and junior colleges supplemented the original file by furnishing the names of employers who had hired past graduates and program completors. Approximately 56,200 employers were surveyed to establish their hiring interest. Initially, about 7,000 employers responded with hiring interest; as of the spring of 1977, there were over 10,000 employers who were receiving CAP-O-GRAMS. Through design, CAPS requires the lowest possible effort by employers. Employers are requested to provide information once a year.

Registration of Seniors. In addition to an employer file, the CAPS System requires a file of seniors/graduates or program completors. All graduates are not available for employment due to plans to continue their education, enter the military service, pursue a home career, or other reasons. Therefore, it is necessary to determine which seniors will be available for employment following their graduation and those who want the placement services of CAPS. The CAPS system was designed to include a reasonable level of school involvement.

In Duval County, seniors are registered into CAPS in the fall, simultaneously with registration into the ESRI Senior Assessment (plans survey) and Follow-up Survey systems. Services for the Senior Assessment and the

Follow-up Survey, in addition to CAPS, are contracted from ESRI in Duval County. Registration for all three systems has been incorporated into one registration through the use of a single, machine-readable form. Registration into CAPS is voluntary for students.

Distribution of CAP-O-GRAMS. The information from the employer file and senior/graduate file is merged and distributed to employers through CAP-O-GRAMS. Each employer receives individually prepared CAP-O-GRAMS which have contact information on seniors/graduates. The contact information includes the name, address, phone number, curriculum area, and school of seniors/graduates. Employers use their own methods to contact potential employees.

Seniors/graduates are listed by the computer in order of geographic proximity to employers on the basis of zip codes. Duval County seniors/graduates were on CAP-O-GRAMS to employers throughout Florida. CAP-O-GRAMS are distributed three times each year. Graduates return "CAPS Continuation Cards" in order to remain on CAP-O-GRAMS following graduation.

APPRAISAL OF CAPS

The senior class of 1976 was the first group in Duval County to receive the services of CAPS. The follow-up survey of the class of 1976 is being conducted currently; this survey eventually will produce data for a formal assessment of CAPS. An appraisal of CAPS based upon subjective experience is mostly favorable.

The CAPS System as developed by ESRI and implemented in Duval County, is sound in design and application. This system is an exemplary demonstration of the efficient use of computerization. However, there were problems in the initial implementation of CAPS. These problems related

to adjusting CAPS to school programs and to the orientation of school personnel and students. Awareness of CAPS has increased with the second year of the program. Early observations seem to indicate that added emphasis is needed in publicizing the CAPS program in order to obtaining greater desire for participation by students, school personnel, and employers.

The CAPS system includes products in addition to CAP-O-GRAMS which placement personnel can use in increasing their effectiveness. Among these products are a School/Curriculum Directory, an Employer Directory, and a periodic Placement Status Report. The School/Curriculum Directory is useful in providing a total picture of school and district course offerings. The Employer Directory provides school placement personnel with a usable listing of employers with expressed hiring interests. The Placement Status Report provides school placement personnel with the names of students who indicate a need a career planning assistance and/or placement services.

In summary, CAPS has given the placement program in Duval County something beyond what was available for students prior to its implementation. CAPS is a means of maximizing limited resources in supplementing placement services; however, the system is not intended to supplant existing placement services or to be implemented in lieu of a comprehensive placement program. The cost benefit effect of CAPS is impressive in terms of the numbers of employers involved and the extent of advertisement for seniors/graduates available for employment.

SECTION VII

FOLLOW-UP: AN INTEGRAL COMPONENT IN INSTITUTIONAL RESEARCH AT A JUNIOR COLLEGE

SECTION VII

FOLLOW-UP: AN INTEGRAL COMPONENT IN INSTITUTIONAL RESEARCH AT A JUNIOR COLLEGE

Dr. Robert E. Eberley

The purpose of the junior college follow-up effort is to judge the effectiveness and efficiency of programs as they enable students to achieve the competencies which are related to successful performance expected of graduates. More specifically, a follow-up program should be designed to answer two basic questions:

1. Are you teaching the subject matter that will enable the student to qualify for a requisite job or for admission to another institution where that student will continue his/her education?

2. Are the standards for a program of a sufficient quality that completers of a program are competitive with their comtemporaries?

As a first step in implementing such a program, a director needs to be appointed whose first task will be to determine the viability and credibility of the goals and objectives of the institution. Just about any college catalog has a set of objectives or goals which read something like "Understand and enjoy literature, art, music, and other cultural activities as expressions of personal and social experiences, and participate to some extent in some form of creative activity," At the general level, this is an acceptable statement, but at the operational level these needs to be some tangible evidence that the college is fostering the development of the above objective. If the director is to have any success, he/she must determine that the college is practicing what it preaches.

Once this determination is made, the next step is to move to the program level and assist the program managers with their goals and objectives. Keep in mind that goals are statements of broad ranges of behaviors that are expected of the student, whereas objectives are definitive student actions. To accomplish this task, you will need the direct support of the administration of your institution. Also, you will need to be perceived by the program managers who are likely to be department chairmen as a person who is available to assist them not as a person who is directing them. Your job is difficult enough without further complicating matters by incurring the wrath of the people who are going to make the system work.

Once the program goals and objectives are established, the concept of performance objectives need to permeate down to the course level. When this is accomplished, your entire curriculum, in terms of goals and objectives, will be pulling in a planned direction and it will be a curriculum that can be measured.

Now that you have a curriculum defined in performance terms, you need to begin working with the support services. These include business services, student services, learning resources, etc. The people in these areas must be cognizant of the curriculum outcomes and must design their procedures to support the curriculum objectives.

In summary, it takes a total cooperative effort of all members of the academic community to bring about a performance-based curriculum. You can count on some dragging their feet and the best you can do for them is to continue to offer their assistance.

The second step in the process of developing a follow-up program is to initiate and implement a research program. This research will yield

information on how well you are meeting your stated objectives for each program and whether a program contained the right objectives. Basically, you should design your research to derive the following data:

a) The number of students who have entered a program.

b) The number of students who have withdrawn and the number of students who have completed a program.

c) The number of graduates who have been placed.

d) The number of graduates who have continued their education at another institution.

e) The number of graduates whose performance on the job has been evaluated in terms of the performance outcomes established for the program.

f) The adjustments, if any, which have been made in the performance outcomes expected of the graduates of a program.

g) The adjustments, if any, which have been made in a program and in the way it is delivered and supported in the institution.

h) The extent to which the program has defined performance outcomes, appropriate student performance assessment procedures for use prior to graduation, appropriate procedures for assessing the performance of students on the job, and instructional and support procedures which are based on the performance outcomes.

The implementation of the research program will consist of surveys sent to the graduates and the leavers of the programs, surveys sent to the employers of the graduates of the occupational programs, and a statistical follow-up of graduates continuing their education at a four-year college or univeristy.

More precisely, each student or a representative sample who has attended your college should be surveyed with the purpose of soliciting their evaluation of the educational experience received while attending the school. (Figure 1) The survey leavers will receive should differ from the one the graduates will complete.

Figure 1

Sample of Items Structured to Evaluate

Educational Experience

Please evaluate the MJC General Education Education Requirements according to the quality of the instruction and how well the course content met your needs.

(A) Excellent (C) Good (E) Inadequate
(B) Very good (D) Fair (X) Not taken while attending MJC

	Quality of Instruction	How well course content met your needs
COMMUNICATIONS		
ENG 100	____	____
ENG 101-102	____	____
SP 105	____	____
Other	____	____
SOCIAL SCIENCE		
HIST 101-102	____	____
HIST 103-104	____	____
POL SC 105	____	____
SOC SC 105	____	____
Other	____	____
MATHEMATICS		
MATH 100	____	____
MATH 101	____	____
MATH 106	____	____
MATH 107	____	____
Other	____	____

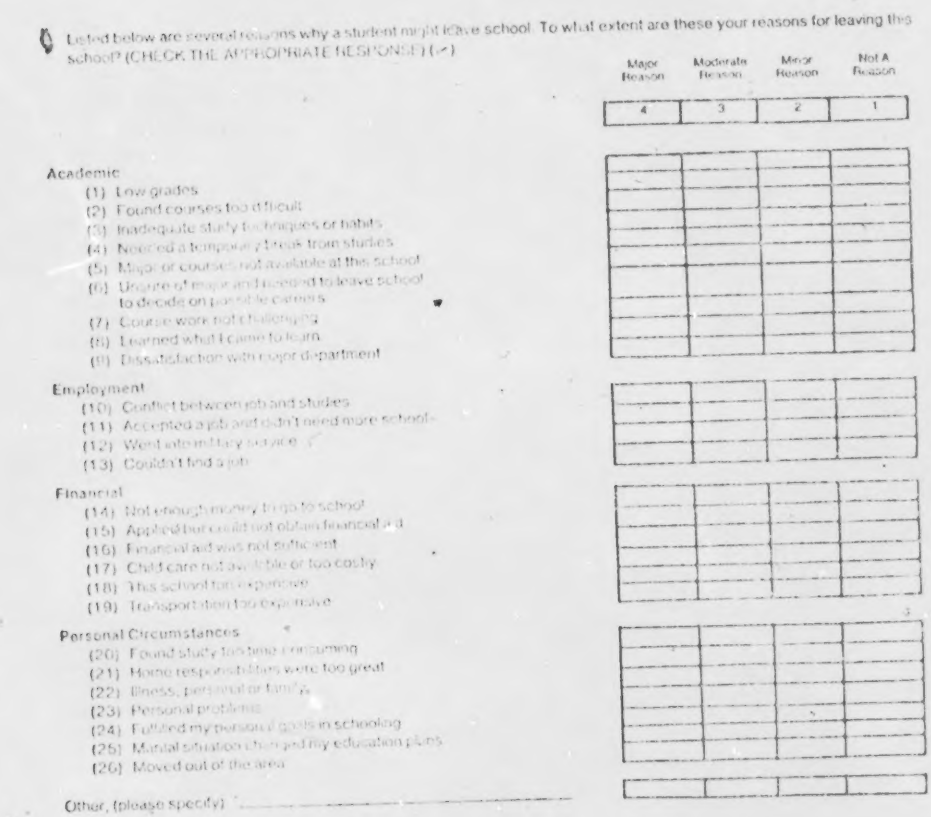
	Quality of Instruction	How well course content met your needs
SCIENCE		
BIO SC 101-102	____	____
PHY SC 101-102	____	____
CHEM 201-202	____	____
PHY 201-202	____	____
Other	____	____
HUMANITIES		
ART 207	____	____
TAR 208	____	____
PHIL 205	____	____
REL 210	____	____
Other	____	____
PHYSICAL EDUCATION		
PE 101 (Conditioning)	____	____
PE 102 (Tennis)	____	____
PE 105 (Bowling)	____	____
PE 202 (Golf)	____	____
Other	____	____

Concerning the leavers, the evaluation should be directed more to why they left whereas with the graduates, you are more concerned with the effectiveness and efficiency of the process. (Figure 2) This is not to say that leavers cannot evaluate the effectiveness and efficiency of the programs in which they are enrolled, but for the most part, leavers were not around long enough to have the exposure to the process, if your questions are specific. For example, asking a leaver to evaluate a specific course is not recommended. Chances are he did not take it. What the leaver can tell you though is which of his/her needs were not met.

Figure 2

Sample of an Item Structured to Solicit

Information Related to Why a Student Left a Program


Listed below are several reasons why a student might leave school. To what extent are these your reasons for leaving this school? (CHECK THE APPROPRIATE RESPONSE) (✓)

	Major Reason	Moderate Reason	Minor Reason	Not A Reason
	4	3	2	1
Academic				
(1) Low grades				
(2) Found courses too difficult				
(3) Inadequate study techniques or habits				
(4) Needed a temporary break from studies				
(5) Major or courses not available at this school				
(6) Unsure of major and needed to leave school to decide on possible careers				
(7) Course work not challenging				
(8) Learned what I came to learn				
(9) Dissatisfaction with major department				
Employment				
(10) Conflict between job and studies				
(11) Accepted a job and didn't need more school				
(12) Went into military service				
(13) Couldn't find a job				
Financial				
(14) Not enough money to go to school				
(15) Applied but could not obtain financial aid				
(16) Financial aid was not sufficient				
(17) Child care not available or too costly				
(18) This school too expensive				
(19) Transportation too expensive				
Personal Circumstances				
(20) Found study too time consuming				
(21) Home responsibilities were too great				
(22) Illness, personal or family				
(23) Personal problems				
(24) Fulfilled my personal goals in schooling				
(25) Marital situation changed my education plans				
(26) Moved out of the area				
Other, (please specify) _____				

Follow-up to employers can be very specific--(Is the former student equipped to do the job and does he perform at an acceptable level of excellence?) (Figure 3) Follow-up to another institution is more intricate in that you cannot expect professors to fill out questionnaires on hundreds for former students. Furthermore, obtaining a consensus of agreement on how well the students were prepared at the community college would be rather difficult. What is suggested is that a statistical methodology be

Figure 3

Coverletter and Instrument Structured to

College Employer Evaluation Information

Coverletter

We are attempting to evaluate the effectiveness of the 1973 graduates of the Associate Degree Nursing Program at Manatee Junior College. Attached is a short questionnaire which we would appreciate your completing for each graduate. Please return the questionnaire in the enclosed stamped, addressed envelope.

We are interested in knowing what position the graduate has at the present time. A copy of your most recent evaluation of the graduate's performance would serve our purposes, if you wish to share this with us. A brief summary of the graduate's performance during employment will suffice if the above is not available.

Sincerely yours,

Instrument

A copy of your most recent evaluation of this graduate will be satisfactory, if you wish to share this with us. If not available, please comment on whether this graduate:

a) had needed knowledge and technical skills as she began practice;

b) met the standards which you had established for the position she assumed.

(Signature and Title)

devised which will compare the performance of native students from the next institution with the performance of former community college students who transferred to that institution. (Figure 4) The comparison would be on the basis of work accomplished by both groups in their third year. Also, the two groups should be matched for similar preparation during the first and second year of college.

Once all the data is collected and has been analyzed and put into a usable format, the program managers need to receive the results. They

need to decide if adjustments in program outcomes or in the way the program is delivered and supported by the community college are needed.

The process as outlined herein is a continuous one. If you are doing it right, you are going to be asked to initiate and develop more or different research information. Keep in mind, you are providing a service and be prepared to change to meet the needs of those you assist.

Figure 4

METHODOLOGY DESIGNED TO COMPARE PERFORMANCE OF MJC GRADUATES
WITH NATIVE UNIVERSITY STUDENTS

COLLEGE OF BUSINESS ADMINISTRATION

	Manatee Junior College	Community Colleges in this Region	Florida Community College	Native USF Students	Out-of-State Community College	In-State Community College	TOTALS
TOTAL STUDENTS	29	279	320	64	80	36	500
AVERAGE GPA USF	2.7	2.5	2.6	2.7	2.6	2.6	2.6
AVERAGE MAJOR GPA USF	2.1	2.2	2.1	2.3	2.2	1.9	2.1
AVERAGE CORE GPA USF	2.5	2.4	2.4	2.4	2.2	2.4	2.4
TOTAL STUDENTS WITH GPA UNDER 2.0	3 (10%)	35 (12%)	36 (11%)	4 (6%)	7 (9%)	3 (8%)	50 (10%)
TOTAL STUDENTS WITH MAJOR GPA UNDER 2.0	7 (24%)	83 (30%)	98 (31%)	16 (25%)	20 (25%)	15 (42%)	149 (30%)

SECTION VIII

A MODEL FOR THE COLLECTION OF PERFORMANCE FOLLOW-UP INFORMATION

SECTION VIII

A MODEL FOR THE COLLECTION OF PERFORMANCE FOLLOW-UP INFORMATION

Dr. Jack Dale

Follow-up studies are generally conducted to collect information related to placement status, program satisfaction, facilities evaluation, and salary range. Selected data bits that are also commonly reported by such studies include demographic characteristics such as race, sex, and marital status. This type of information system is essential for educational managers and planners, but it is not sufficient to reliably assess if programs have met their stated goals and objectives.

A necessary component that must be added to this student follow-up system is the collection of performance indicators from employers and educators. The assemblage of such information has been more difficult to accomplish than the student generated data because it requires additional contacts with individuals many times outside of the local or educational setting.

The system described in this section has three basic parts--an employer survey, a junior/community college program and a university component. These three efforts allow for the collection of performance data on the majority of our students, but it does not exhaust all placement possibilities or types of post-secondary educational possibilities.

The first segment of the system is the contact with the employers of students who completed a program and are now working on a full-time basis. This effort was initiated by first mailing a survey to the former student to acquire student permission to contact their employers. Student hesitancy

to allow this contact has been low with only 11% of a recent vocational survey refusing this permission. With this sanction secured, contact is made by mail to collect information related to student preparedness and perfcrmance.

Figure 1 provides a sample of the types of data collected from the employers. Items on the instrument generally relate to three specific areas: (a) quality and quantity of work, (b) employability skills level, and (c) how the placement was secured. This type of information, if properly analyzed and reported, allows planners to evaluate the results of their programs, and to identify areas needing additional effort and

Figure 1

EMPLOYER SURVEY OF FORMER STUDENTS

Conducted February 1976

Graduates of FY 1974-1975

Results represent a response from a cross section of 289 employers.

Amount of work performed by this person:	Above Average 47%	Average 48%	Below Average 2%
Quality of this person's work:	Consistently high 54%	Generally acceptable 41%	Not always acceptable 3%
Followed prescribed work procedure correctly?	Yes 93%	No 1%	Sometimes 5%
Adapt to different work assignments?	Adapts easily 83%	Adapts, but with difficulty 14%	Great difficulty in adapting 3%
Supervision required to perform this job?	Little or no supervision 47%	About the average amount 49%	A great deal of supervision 3%
Interest taken in work:	A great deal 61%	About the average amount 37%	Little or no interest 1%
Reaction to constructive criticism:	Reacts positively 61%	Reacts indifferently 37%	Reacts negatively 1%
Does this person work well with others?	Yes 97%	No 2%	
Capable of advancement?	Yes 92%	No 7%	

resources. The system also enhances the credibility of the educational system with the business community because it demonstrates our concern for the quality of the product generated from our programs.

The second part of this performance follow-up system has proven to be much more difficult to develop and implement. This component called for the regular collection of data related to performance of former students at state community and junior colleges. The problems encountered in planning this system were related to three basic considerations. First, the information reported must be analyzed in such a manner to be of value to the department chairperson level school official. An overall student grade point average by county or by school is not a precise enough statistic to provide the basis for program analysis that is needed. A second factor that was considered was that the system had to be "automatic," it could not be so complicated or time consuming as to require the work of a doctoral candidate for replication each year. The last problem that had to be solved was how to develop a system precise enough to give measure of performance specific to a particular school or department without violating confidentiality regulations related to student records.

Figure 2 displays the type of student performance information that has been made available to district schools by this system. This program reports that student performance in seventeen lower level core type courses (100, 101, and 105 levels). Courses in these areas are required of both AA and AS seeking students, thus data is available on most of the individuals attending the college.

This format allows for the breakdown of information into the basic areas of language arts, social science, mathematics, and science. It allows a department chairperson to compare how graduates from their school

Figure 2

PERFORMANCE FOLLOW-UP OF HIGH SCHOOL 1973, 1974 AND 1975
GRADUATES THAT HAVE ATTENDED MANATEE JUNIOR COLLEGE

BASIC SCIENCE (AREA I) COURSES	HIGH SCHOOL STUDENTS				COUNTY		STUDENTS FROM COUNTIES EXCEPT	
	NUMBER OF COURSES COMPLETED	NUMBER OF COURSES WAIVED THROUGH CLEP	STUDENTS GPA	CLEP PERCENTILE AVERAGE	STUDENTS GPA	CLEP PERCENTILE AVERAGE	STUDENTS GPA	CLEP PERCENTILE AVERAGE
GENERAL BIOLOGY	41	12	1.92	66.00	1.76	68.30	2.03	66.12
BOTANY	12	0	2.16	0.00	2.50	0.00	2.62	0.00
CHEMISTRY FOR APPLIED SCIENCES	0	0	0.00	0.00	0.00	0.00	0.00	0.00
GENERAL CHEMISTRY AND QUALITATIVE ANALYSIS	4	0	1.75	0.00	1.97	0.00	2.23	0.00
GENERAL PHYSICS	2	0	0.00	0.00	1.81	0.00	2.05	0.00
PHYSICAL SCIENCE	13	15	2.38	64.33	2.03	69.47	2.59	65.81
TOTAL FOR AREA I	72	27	1.98	65.07	1.89	68.95	2.21	65.95
TOTAL FOR ALL AREAS	443	73	2.19	66.82	2.10	66.89	2.31	64.83

are performing in the basic areas in relation to other schools in the district and with all other individuals at the college. The chairperson can also compare how graduates from their high school are performing in relation to the four areas specified.

This breakdown also shows the number of students attending the college that are being required to take remedial English and math courses, and provides the basis for school, district and college-wide comparisons on this variable. CLEP data is also available through this system with both the number of courses being waived through the exam and the percentile average reported. This post-secondary performance follow-up system is currently available for district graduates attending state junior/community colleges but has yet to be adapted to a university setting.

The task of collecting follow-up information from the university was impeded by the same problem faced when collecting it from the junior/community college. The data had to be precise enough to be of value to the program managers, require little time to collect and analyze, and not violate confidentiality laws.

The system reported in Figure 3 is based upon the enrollment for each college at the university and includes total grade point average, major grade point average, and core grade point average. It also reports the number and percent of students with a gr[illegible] point average under 2.0 and with a major grade point average under 2.0. These statistics are presented in a format that allows comparisons to be made between the community college and others in the area and state. Comparisons can also be made between the students from the college and in- and out-of-state transfers,

as well as those completing their first two years at the university, as opposed to those doing their freshman and sophomore work at a state junior/ community college.

Figure 3

COLLEGE OF BUSINESS ADMINISTRATION

FOLLOW-UP REPORT

	MJC	AREA CC	ALL CC	USF	OUT OF STATE CT	IN STATE CT	TOTAL
TOTAL STUDENTS	29	279	320	64	80	36	500
AVERAGE GPA USF	2.7	2.5	2.6	2.7	2.6	2.6	2.6
AVERAGE MAJOR GPA USF	2.1	2.2	2.1	2.3	2.2	1.9	2.1
AVERAGE CORE GPA USF	2.5	2.4	2.4	2.4	2.2	2.4	2.4
	%	%	%	%	%	%	%
TOTAL STUDENTS WITH GPA UNDER 2.0	3 (10)	35 (12)	36 (11)	4 (6)	7 (09)	3 (08)	50 (10)
TOTAL STUDENTS WITH MAJOR GPA UNDER 2.0	7 (24)	83 (30)	98 (31)	16 (25)	20 (25)	15 (42)	149 (30)

These performance follow-up systems described in this section are operational but not complete. They have been implemented to include only the institutions in this region and are currently under study by the Florida State Department of Education for adaptability by other state schools and colleges.

PLACEMENT AND FOLLOW-UP BIBLIOGRAPHY

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1. "(An) Analysis of Student Follow-up Data for Administrative Decision Making." Jones, Charles B. Bryan Independent School District, Texas, June 30, 1974.

2. "Can the Mail-Back Bias Contribute to a Study's Validity?" Larson, Richard F. and Catton, William R., Jr. American Sociological Review, Vol. 24, No. 2, April, 1959.

3. "Case Studies in Practical Career Guidance, Number 1: Baltimore Placement and Follow-up Program, Baltimore City Public Schools, Baltimore, Maryland." Ganshow, Laurie J. American Institutes for Research in the Behavioral Sciences, Palo Alto, California, June, 1973.

4. "Career Education in Newark: A Report of the Survey of Career Education in the City of Newark, New Jersey." Vol. II, Appendixes. Greater Newark Chamber of Commerce, New Jersey, June, 1973.

5. "Community College and Technical Institute Follow-up Study of Student Enrolled during One or More Quarters, Fall 1970 to Fall 1971." Roesler, Elmo V., Ed. Appalachian Developing Institutions Consortium, 1971.

6. "(A) Continuation of the 1963 High School Graduates Follow-up Study." Colorado State University, Ft. Collins, September, 1966.

7. "Controlling Bias in Mail Questionnaires." Clausen, John A. Journal of the American Statistical Association, Cornell University, December, 1947.

8. "Data Base Establishment and Model Development for a Coordinated Comprehensive Placement System, Final Report." Wisconsin University, Madison. Center for Studies in Vocational and Technical Education, November, 1975.

9. "Decision Making Based on Follow-up Information." Delores Pospesel, Minnesota State Department of Education, Vocational-Technical Division, December 4, 1975.

10. "Delaware's Occupational-Vocational Education Model: Establishment and Implementation of a K-12 Career Guidance and Job Placement Program." Delaware State Board for Vocational Education, Milford, July, 1973.

11. "Determining the Size of the Sample." Politics, Power, Polls, and School Elections. Berkleley, California: McCutchan Publishing Corporation, 1971.

12. "Development of a Research Instrument which Can Assess the Occupational and Educational Status of Former Occupational Enrollees of North Carolina Community Colleges and Technical Institutes." Guilford Technical Institute, Jamestown, North Carolina, June 30, 1972.

13. "Developing and Conducting Follow-up Studies of Former Students." McKinney, Floyd L. and Oglesby, Charles. Kentucky Research Coordinating Unit, Lexington, Kentucky, September, 1971.

14. "Enrollment and Follow-up Trends of Full-Time Day Programs of Minnesota Vocational-Technical Institutes." Minnesota University and Minneapolis Department of Vocational and Technical Education, December, 1975.

15. "Evaluation of a Questionnaire or Interview Schedule." Phipps, Lloyd J. and Hastings, J. Thomas. University of Illinois. Paper developed for AVA Pre-Session on Developing Data Collection Instruments, Dallas, Texas, December, 1968.

16. "Evaluation of Three School-Based Job Placement Projects in Pennsylvania, Final Report." Pennsylvania Research Coordinating Unit for Vocational Education, Harrisburg, Pennsylvania, November, 1975.

17. "Five Features Helped This Mail Quationnaire Pull from 60% to 70%." Ray Robinson. Printers Ink, February 22, 1946.

18. "Five Year Alumni Study of Community College and Technical Institute Students, 1966-67 to 1970-1971." Appalachian Developing Institutions Consortium, 1971.

19. "(A) Five Year Follow-up of Students Enrolled in Post-Secondary Vocational-Technical Transfer Programs." American College Testing Program, Iowa City, Iowa. Paper presented at Annual Meeting of the American Vocational Association, Anaheim, California, December, 1975.

20. "Five Year Follow-up Survey of Albemarie High School Graduates, Final Report." Albemarie County Schools, Charlottesville, Virginia, August 1, 1975.

21. "Follow-up Interviews with Former Students, Fall 1972-1973 to Spring 1972-1973." Coast Community College District, Costa Mesa, California, June, 1973.

22. "Follow-up of Maple Woods Community College Occupational Graduates, 1970-1974, Final Report." Maple Woods Community College, Kansas City, Missouri, March, 1975.

23. "Follow-up of 1974 Graduates; Career Education Project." State Fair Community College, Sedalia, Missouri, 1975.

24. "Follow-up of 1974 Graduates in Selected Technology Programs, Lakeland Community College." Lakeland Community College, Mentor, Ohio, April, 1975.

25. "Follow-up of 1965 Graduates." Wilson, Richard C. Connecticut State Department of Education, Hartford, Connecticut, 1966.

26. "Follow-up of No-Shows: Special Report: School Board of Sarasota County." Preston, Jim. Sarasota County Board of Public Instruction, Sarasota, Florida, December 1, 1975.

27. "Follow-up of Vocational Graduates, State of Arkansas, 1973-74 Validation Report." Educational Planning and Evaluation Services, Magnolia, Arkansas, July 1, 1975.

28. "Follow-up of Wisconsin Schools of Vocational, Technical and Adult Education." Wisconsin University, Madison, Wisconsin. Center for Studies in Vocational and Technical Education, June, 1970.

29. "Follow-up Studies of Former Occupational-Technical Students at Community Colleges, Research Report No. 1." Virginia State Department of Community Colleges, Richmond, Virginia, 1974.

30. "(A) Follow-up Study of Auditorially, Visually, and Orthopedically Handicapped Pupils in Cincinnati, Final Report." Pittsburgh University, Pennsylvania Office of Research and Field Services, September, 1970.

31. "Follow-up Study of Bucks County Community College Graduates, 1965-1972." Bucks County Community College, Newtown, Pennsylvania. Office of Institutional Research, January, 1973.

32. "Follow-up Study of Graduates from the 1973 Los Angeles City College Registered Nurse Program." Los Angeles, California, March, 1974.

33. "Follow-up Study of New River Community College Transfers Who Graduated in the 1972-1973 School Year and Follow-up of 1974 Graduates in Occupational-Technical Programs." New River Community College, Dublin, Virginia, April, 1975.

34. "Follow-up Study of 1975 Vocational-Technical Alumni. Research Report Series, Vol. 7, No. 6." William Raney Harper College, Palatine, Illinois, December, 1975.

35. "(A) Follow-up Study of Participants in Illinois Projects Funded with Education Professions Development Act (553) Grants for Fiscal Years 1969-1973, Final Report." Northern Illinois University, De Kalb, June, 1975.

36. "(A) Follow-up Study of the Post-School Employment Success of Graduates from Four High School Special Education Programs in the Midwestern Intermediate Unit IV in Pennsylvania for the School Years 1969-1970, 1970-1971 and 1971-1972, Final Report." Midwestern Intermediate Unit IV, Grove City, Pennsylvania, May, 1973.

37. "Follow-up Study of Sarasota County's 1974 Senior Class Six Months after Graduation." Preston, Jim. Sarasota County Board of Public Instruction, Sarasota, Florida, June, 1975.

38. "(A) Follow-up Study of the 1962-1966 James Wood High School Industrial Cooperative Training Program." December, 1969.

39. "Follow-up Study; Non-Academic Attrition at Bucks County Community College, 1965-1972." Bucks County Community College, Newtown, Pennsylvania. Office of Institutional Research. August, 1973.

40. "Follow-up Survey of Students at Eastern Arizona College." Eastern Arizona College, Thatcher. January, 1974.

41. "From School to Work: Improving the Transition, A Collection of Policy Paper Prepared for the National Commission for Manpower Policy." 1976

42. "Georgia Guidebook: Job Placement Services." Georgia State Department of Education, Atlanta, Georgia, 1971.

43. "The Graduates 1970: A Follow-up Study of the Students Who Graduated from Montgomery Community College in 1970." Bleil, David F., Jr. Montgomery County College, Rockville. Office of Institutional Research, 1972.

44. "Guide for Questionnaire Construction," from Arthur Fornhauser and Paul B. Sheatshley, "Questionnaire Construction and Interview Procedure." Research Methods in Social Relations. New York: Henry Holt and Company, 1959.

45. "Guidelines for Conducting Periodic Follow-up Studies in the VTAE System." Wisconsin State Board of Vocational, Technical, and Adult Education, Madison, 1970.

46. "Guidelines for Placement Services and Follow-up Studies Provided by School Districts." Florida State Department of Education, Tallahassee, Florida, December, 1973.

47. "Hawaii Community College Vocational-Technical Graduate Follow-up Studies, 1968-1971." Hawaii University, Honolulu. Community College System, June, 1972.

48. "(A) Historical and Current Follow-up Study of Oklahoma Vocational-Technical Graduates." Oklahoma State Department of Vocational and Technical Education, Stillwater. Division of Research, Planning, and Evaluation, 1975.

49. "How Mail Surveys May Be Made to Pay," Seitz, Richard M. Printers Ink, December 1, 1944.

50. "Implications of Non-response for the Interpretation of Mail Questionnaire Data," Donald, Marjorie N. Public Opinion Quarterly, Vol. 24, No. 1. Spring, 1960.

51. "Increasing Response from Mail Questionnaires." Quoted from Frederick Mosteller, "Errors: Non-Sampling Errors" in David L. Sills (Ed.), International Encyclopedia of Social Sciences, Vol. 5. Crowell Collier and Macmillan, Inc., 1968.

52. "Job Placement and Follow-up of Secondary School Vocational Education Students, PREP-32." National Center for Educational Communication (DHEW/OE), Washington, D.C. July, 1970.

53. "Job Placement Coordinator's Handbook." Allen, Thomas R., Jr. Marshall University, Huntington, West Virginia. Department of Vocational-Technical Education, 1972.

54. "Job Satisfaction Characteristics of Selected Associate Degree Graduates, Vocational-Technical Education Research Report." Gillie, Angelo C. and Mann, Edward. Pennsylvania State University, University Park, Department of Vocational Education. May, 1973.

55. "Mail Questionnaire as a Research Problem." Franzen, Raymond and Lazarfeld, Paul F. Journal of Psychology, Vol. 5, No. 20, October, 1945.

56. "Making Effective Use of Educational Follow-up Information." Headrick, Mark. Florida Department of Education, Tallahassee, Florida, 1977.

57. "Mail Questionnaire Efficiency: Controlled Reduction of Non-response." Bachrack, Stanley D. and Scoble, Harry M. Public Opinion Quarterly, Vol. 31, No. 2, Summer, 1967.

58. "Making Mail Surveys More Reliable." Robinson, R. A. and Agisim, Philip. Journal of Marketing, Vol. 15, No. 4, April, 1951.

59. "(A) Manual for Conducting Follow-up Surveys of Former Vocational Students." Research and Development Series No. 106. Ohio State University, Columbus, Center for Vocational and Technical Education, 1975.

60. "Maximizing Returns on Mail Questionnaires." Levine, Sol and Gordon, Gerald. Public Opinion Quarterly, Vol. 22, No. 4, Winter, 1959.

61. "The Minnesota Vocational Follow-up System: Rationale and Methods." Minnesota University, Minneapolis Department of Trade and Industrial Education. February, 1973.

62. "1975 Graduates Placement Report: New Hampshire Technical Institute and New Hampshire Vocational-Technical Colleges." New Hampshire State Department of Education, Concor. Division of Post-Secondary Education, 1975.

63. "'No frills' follow-up: A Cookbook Approach for Small Colleges." Walsh, E. Michael. Journal of College Placement, Spring, 1977.

64. "Non-Sampling Errors in Surveys and Experiments." Weyer, Donald L. American Educational Research Association, May, 1971.

65. "(A) One-Year Follow-up Study of the Thirty-Seven Graduates Class of 1972 of the Jackson County Adult Evening High School Completion Program." Gran, James R. Jackson County Adult Evening High School Program, Maquoketa, Iowa. June, 1973.

66. "Placement Component," Ralph Roberts. Determining the most effective procedures for implementation of school-side junior high career exploratory experiences and for the placement and follow-up of all existing students K-14, Final Report. Volume II. Alabama State Department of Education, Division of Vocational Education and Community Colleges. February, 1975.

67. "Placement and Follow-up Program 1974-1975. Sarasota County, Florida. Year End Report." Preston, Jim. Sarasota County Board of Public Instruction, Sarasota, Florida. June 23, 1975.

68. "Placement Services, A Training Manual," Bertis E. Capehart. Ann Arbor, Michigan: Prakken Publications, Inc., 1977.

69. "Priority: Obtaining Accurate Information Concerning Placement and Follow-up Program Completions in Vocational Education at All Levels. Activities: Strategies for a Placement Service at the LEA Community Level through the Development of a Model Follow-up Instrument and Computerized Procedure Applicable to High or Post-High Utilization." Vincennes University, Indiana, May 31, 1975.

70. "(The) Problem of Non-Response in Sample Surveys." Hansen, Morris H. and Hurwitz, William N.. Journal of the American Statistical Association, 1947.

71. "Professional Mail Surveys." Erdos, Paul L. New York: McGraw-Hill Book Company

72. "Project 'Follow-up', Interim Report." Utah Research Coordinating Unit for Vocational and Technical Education, Salt Lake City, December, 1970.

73. "Questionnaire Design and Attitude Measurement." Oppenheim, A.N. New York: Basic Books, Inc., 1966

74. "(The) Reliability of the Minnesota Vocational Follow-up Student Questionnaire." Minnesota University and the Minnesota Department of Vocational and Technical Education. December, 1975.

75. "(A) Report of the Development and Evaluation of an Occupational and Volunteer Service Placement Office (1972-1973)." Schott, James L. and Bailey, Carol D. The Tennessee Research Coordinating Unit.

76. "School-Based Job Placement: A Dimension for the Delivery of Guidance Services. A Brief Overview of Ccunselor Involvement in a School-Based Job Placement Service." Phi Delta Kappan, January, 1968.

77. "School-Based Job Placement Service Model, Final Report." Columbia-Montour Area Vocational-Technical School, Bloomsburg, Pennsylvania, June 30, 1975.

78. "Status of Baccalaureate Degree Recipients of 1964-1966, 1968, and 1972 Six Months after Graduation." Virginia University, Charlottesville. Office of Institutional Analysis. June, 1973.

79. "(A) Step-by-Step Procedure for Implementing a Computerized Follow-up System." Bryan Independent School District, Texas, 1973.

80. "Stimulating Responses to Mailed Questionnaires: A Review." Linsky, Arnold S. University of New Hampshire, Public Opinion Quarterly, Vol. 39, No. 1, Spring, 1975.

81. "Student Follow-up Study: First Time Students, 1970." Tschechtelin, James D. Research Report 75-2. Hartford Community College, Bel Air, Maryland, March, 1975.

82. "(A) Study of Certain Factors Involved in Job Placement Activity of High School Age Youth." Campbell, Norris C. American Personnel and Guidance Association. Washington, D.C. April 5, 1966.

83. "Survey of Post-Placement Experience of TAT Graduates." Worth, Charles C., et. al. Oak Ridge Associated Universities, Tennessee. April, 1973.

84. "Survey Method in Social Investigation." Moser, C.H. and Kalton, G. New York: Basic Books Inc. Publishers, 1972.

85. "Survey Research in the Social Sciences." Glock, Charles, Russell Sage Foundation, 1967.

86. "(A) Survey to Follow-up on Graduates of Sunnyside Arizona High School to Determine Vocational Placement, Final Report." Sunnyside School District, Tucson, Arizona, June 10, 1974.

87. "(A) Systems Approach to Placement and Follow-up: A Computer Model." Jones, Charles B. Bryan Independent School District, Texas, 1973.

88. "Tables of Minimum Sample Sizes." A Report prepared by Creech, F. Reid and Grandy, Jerilee. Princeton: Educational Testing Service, 1973.

89. "Targeted Communications for Instituting Vocational Placement and Follow-up, Interim Report." McCracken, J. David, et. al. Ohio State University, Columbus. Center for Vocatinal and Technical Education, December 31, 1971.

90. "Technical-Vocational-Occupational Five Year Follow-up Study, 1967-1972, Phase 1, Descriptive Statistics." Antelope Valley College, Lancaster, California, 1974.

91. "Three JCCC Career Student Follow-ups, 1974." Johnson County Community College, Overland Park, Kansas, May, 1975.

91. "Treatment of the Non-Response Problem," Dalenius, Tore. University of Stockholm.

92. "Vocational Analysis of Male College Graduates in Liberal Arts." Calbert, Robert, Jr. California University, Berkeley. Survey Research Center. CRP-1924, BR-5-0820, 1967.

93. "Vocational Education Follow-up Study: Business and Industrial Community Attitude toward the Effectiveness of the Vocational Technical Program. Final Research Report, Part II of III." Green, Ralph, Comp. Nebraska Technical College, Milford. 1971.

94. "Vocational Follow-up Report Students Completing Program--Fall 1972 and Spring 1973." Southwestern College, Chula Vista, California, 1974.

95. "Vocational-Technical and Adult Education Student Follow-up Study of 1974-1975 Completion." Preston, Jim. Sarasota County Board of Public Instruction, Sarasota, Florida. May 21, 1976.

96. "Vocational Training and Job Placement of the Mentally Retarded: An Annotated Bibliography." Texas Tech University, Lubbock. Research and Training Center in Mental Retardation, 1974.

97. "Ways to Improve Response Rates in Follow-up Studies," Irvin, Donald E. University of Minnesota. A presentation made to the Placement and Follow-up Interest Section of the Guidance Division of the American Vocational Association, December 8, 1976. Houston, Texas.

98. "What You Should Know about Surveys," Administrators' Swap Shop, Vol. XX, No. 1, October, 1973.

99. "Who Answers Questionnaires?" Suchman, Edward A. and McCandless, Boyd Journal of Applied Psychology, Vol. 24, No. 6, December, 1940.

100. "The Youth Labor Market," Freeman, Marcia. From Book of Papers from School to Work, National Commission for Manpower Policy. United States Government Printing Office, Washington, D.C., 1976.

101. "Young Women in Virginia. A 10-Year Follow-up Study of Girls Enrolled in 54-55 in the Tenth Grade in Virginia High School. A Res. Cont. to Ed. Planning." Jordan, Beth C. and Loving, Roas H. Report No. RCEP-49-NO-1. August, 1966.